

What is claimed is:

1. A semiconductor device comprising:

a circuit region disposed on a semiconductor substrate;

a first guard ring disposed in surrounding relation to said circuit region for preventing water from entering said circuit region from a surrounding area thereof;

a second guard ring disposed between said circuit region and said first guard ring in surrounding relation to said circuit region; and

first connections connecting said first guard ring and said second guard ring to each other and dividing an area sandwiched between said first guard ring and said second guard ring into a plurality of subareas.

2. A semiconductor device according to claim 1, wherein said circuit region has a corner, and said first connections connect a corner of said second guard ring which corresponds to the corner of said circuit region to said first guard ring.

3. A semiconductor device according to claim 1, wherein said circuit region has a corner, and said first connections are spaced at a density which is progressively greater toward the corner of said circuit region.

4. A semiconductor device according to claim 1, further comprising:

a third guard ring disposed between said second guard ring and said circuit region in surrounding relation to said circuit region; and

second connections connecting said second guard ring and said third guard ring to each other and dividing an area sandwiched between said

second guard ring and said third guard ring into a plurality of subareas.

5. A semiconductor device according to claim 4, wherein junctions where said first connections are connected to said second guard ring and junctions where said second connections are connected to said second guard ring are positioned out of alignment with each other.

6. A semiconductor device according to claim 1, further comprising:

a third guard ring disposed between said second guard ring and said circuit region in surrounding relation to said circuit region; and

5 second connections connecting said second guard ring and said third guard ring to each other and dividing an area sandwiched between said second guard ring and said third guard ring into a plurality of subareas;

said second guard ring, said first connections, and said second connections are connected to each other at junctions where the number of  
10 connected linear patterns extending in different directions therefrom is 3.

7. A semiconductor device according to claim 1, wherein said circuit region comprises a first insulating film having a dielectric constant lower than an oxide film and a second insulating film stacked on said first insulating film and different in film quality from said first insulating film, and said second  
5 guard ring covers sides of said first insulating film and a slit between said first insulating film and said second insulating film.

8. A semiconductor device according to claim 7, wherein said first insulating film comprises at least one of a ladder-type hydrogenated silox-

ane film, a hydrogen-containing polysiloxane film, an SiOC film, an SiOF film, an SiC film, and an organic film.

9. A semiconductor device according to claim 4, wherein said circuit region has a corner, and said second connections connect a corner of said third guard ring which corresponds to the corner of said circuit region to said second guard ring.

10. A semiconductor device according to claim 4, wherein said circuit region has a corner, and said second connections are spaced at a density which is progressively greater toward the corner of said circuit region.

11. A semiconductor device according to claim 4, wherein said circuit region comprises a first insulating film having a dielectric constant lower than an oxide film and a second insulating film stacked on said first insulating film and different in film quality from said first insulating film, and said third  
5 guard ring covers sides of said first insulating film and a slit between said first insulating film and said second insulating film.

12. A semiconductor device according to claim 11, wherein said first insulating film comprises at least one of a ladder-type hydrogenated siloxane film, a hydrogen-containing polysiloxane film, an SiOC film, an SiOF film, an SiC film, and an organic film.